

바이오가스 모니터링 시스템 (BIOGAS Monitoring System)



Model : GA3000

용도

- 바이오 가스 중 CH₄, CO₂, O₂ 측정가능 (H₂S 선택사양)
- 혐기성 소화조, 음식물 퇴비화 장치 등 바이오 가스 측정
- 매립지 가스 발전 시스템의 매립지 가스 측정

특징

- ISO 17025 인증 승인
- 빠르고 쉬운 설치 및 관리
- CH₄, CO₂, O₂ 측정가능
- H₂S 5,000 ppm 측정가능(선택사양)
- 알람설정기능
- 각 가스별 4-20mA output

SPECIFICATIONS

Gases To Be monitored	CH ₄ , CO ₂ , O ₂ , H ₂ S(Optional)				
Reading Intervals	Continuous for CH ₄ , CO ₂ , O ₂ Configurable for H ₂ S				
Operating Temperature	0°C to +40°C				
Main power	110 – 230 VAC 50/60 Hz				
Power Consumption	0.1A ± 5%				
Gases Measured	CH ₄ , CO ₂ O ₂ H ₂ S	By dual wavelength infrared cell with reference channel By internal electrochemical cell By external module (electrochemical cell)			
Range	CH ₄ CO ₂ O ₂ H ₂ S	0 – 70% to specification, 0 – 100% reading 0 – 60% to specification, 0 – 100% reading 0 - 25% 0 - 5000ppm			
Typical Accuracy	Gas	0-5% vol	5-15% vol	15%-FS	FS
	CH ₄	±0.5% (vol)	±1.0% (vol)	±3.0% (vol)	70%
	CO ₂	±0.5% (vol)	±1.0% (vol)	±3.0% (vol)	60%
	O ₂	±1.0% (vol)	±1.0% (vol)	±1.0% (vol)	25%
	H ₂ S	0-5000PPM	±100ppm or ±5% of reading (if greater)		

Response Time, T90	CH ₄ CO ₂ O ₂ H ₂ S	≤20 seconds ≤20 seconds ≤20 seconds ≤60 seconds
Oxygen Cell Lifetime		Approximately 3 years in air
H ₂ S Cell Lifetime		Approximately 2 years in air
Flow		550 ml/min typically
Output Channels		Up to Four 4-20mA Output Channels
Alarm Notifications		2 user definable alarms which can be triggered when above or below a set value. Alarms can be latched to advise user if an alarm has occurred. Recovery values can also be defined.
Weight		29 kg
Size		650 x 600 x 210mm
Enclosure		Painted Steel 600 x 600 x 210mm IP54
Display		Liquid crystal display, 40 x 16 characters Fibre optic woven red back-light for low light conditions
Gas Conditioning Filters		User replaceable micro fibre filter

CONFIGURATIONS

Biogas detector	1 ea
Pretreatment gas conditioning	1 ea
4-20mA outputs for each gas	1 ea
User-selectable alarm relays	1 ea
Backlit display	1 ea
IP54 rated weather-proof enclosure	1 ea
Operating manual	1 ea

RECOMMENDED ACCESSORIES

Coalescent filter for catchpot	1 pk
In-Line Water Trap Elements	1 pk
Calibration Gas, Mixture one (CH ₄ 5%, CO ₂ 5%, O ₂ 6%)	1 ea
Calibration Gas, Mixture Two (CH ₄ 60%, CO ₂ 40%)	1 ea
Fine control Valve	1 ea

OPTION

H ₂ S(0-5,000ppm) external module	1 set
H ₂ S(0-5,000ppm), Valve for gas return to process	1 set